



## OBTAINING A PATENT.

It is generally supposed that the patentee of an article, process or new invention has a sure thing and an easy means of gaining wealth, on account of the successes made by a few fortunate inventors. The general public is not aware of the uncertainty and tedious delay which an applicant for patent has to experience before his papers are considered by the patent office in the first stage. To such an extent is this the case, that after a patent has been applied for, it generally takes from six to nine months before it can be considered. It is not therefore wise for the inventor to place his invention on the market until he has had his invention passed upon and accepted for patent. If he does so, and marks it "patent applied for," that does not protect him from infringement by makers of a similar article produced with slight changes. He has not obtained his patent, and cannot prosecute or stop such infringement of his rights. On this account the most necessary invention which our inventive geniuses of the patent producing fraternity can originate at the present time is a new patent process for the complete reorganizations of our slow and unbusiness like system of conducting the issue of patents in the United States patent office. As the last thing any government has been known to do is to effect a reform in the civil service for the benefit of suffering humanity, and as we desire it for many of our most intelligent readers and patrons, we are compelled to call the attention of the already overworked officials of this branch of the public service to the valuable use the inventors of this country can put their inventive ability to, in perfecting a new process or machine for aiding and expediting the at present slow process of patenting an invention. Life is too short in most instances, but it is too long to receive the benefit of his invention, or until his invention is protected by law. In regard to this matter, the great inventor, Thomas A. Edison, has had some experience which he can apply to electrify the system of passing on patents, and thereby become the greatest inventor of the age.—Mining and Metallurgical Journal.

## PROSPERITY.

"Speaking from a mining and smelting standpoint, I find that the west is surely more prosperous today than at any time since the depression, or great decline in silver, in June, 1893," said Simon Guggenheim, general manager of the Philadelphia Smelting and Refining company. "There is no apparent reason why the whole mining section should not continue to prosper, even though the price of metals is somewhat depressed."

"It is true that not many new camps of importance are being discovered or developed, yet the mines that have been in existence for years are today making satisfactory profits, and there still exist many bonanzas, which show not only a large source of revenue to the owners, but give employment to many."

## EXTRA LATERAL RIGHTS.

The recommendations of the international mining congress as to extra lateral rights will be awaited with interest. The proposition to do away with such rights in the future and limit the ownership of a vein to the geographical lines of a mining property has a strong following, while the preservation of the present rule will be stoutly insisted upon.

Since the decision in the Niagara-Blackrock case the champions of the present system have gained ground. If that decision is not materially modified by the future action of the supreme court, litigation growing out of extra lateral claims will be confined chiefly to the question as to continuity of vein, whereas it was formerly necessary to split hairs in fine scientific generalizations.

Had the Amy-Silversmith decision remained the rule of action, and extra lateral rights made dependent upon the relation of the apex to the end lines, the advocates of a plan to make all the boundaries of a claim final would have been reinforced by the intelligent mining men of every state. But the right to follow the dip of a vein under the side line, even if its apex follows the same course, gives to the mine owner all that he could secure by having greater width of claim.

It is a good regulation that limits the size of a mining claim to its present dimensions. With extra lateral rights assured it is wide enough, and no one will contend that 1,500 feet is not ample length for all practical purposes. It is not always possible to so locate a claim that the discovery vein will extend through its end lines. To do this would sometimes require an amount of exploitation not justified outside the discovery shaft. This provision, made necessary by the findings in the Amy-Silversmith case, is made unnecessary by the Niagara-Blackrock. To enlarge claims to a square, say 1,500x1,500, would be to add merely to the expense of patenting a lot of useless ground in ninety-nine cases out of every hundred.

The agitation over the question that has been going on for some years, however, cannot fail to find expression in the mining congress. In view of the intellectual growth of the supreme court of the United States, and its broader comprehension of the equities of mining, we trust the international

mining congress will settle the apex question by letting well enough alone.—Western Mining World.

## NUGGETS FROM THE HILLS.

The King of Arizona mine near Yuma has a cyanide plant. Ground is being graded for the Qualey Bros. smelter at Safford Graham county.

Yavapai county has 390 stamps in place of which at least 259 are known to be busy.

Negotiations are under way for the erection of a twenty-stamp mill at the Yellow Dog mine near Yuma.

A 120-ton cyanide plant is soon to be erected to work the tailings from the Mammoth mill in Pinal county.

The Big Bag district is sadly in need of a custom mill to extract the gold from the large quantities of ore piled up on the dumps.

A new and very rich strike of ore is reported in new ground to the north of the main workings of the Azurite copper mine near Tucson.

The Arizona Copper company at Clifton proposes to add to its present great reduction works two 150-ton concentrators and a new furnace.

The Fresnal mines of Wicks and the Allisons, in the Baboquivari, are turning out ore running \$1,100 gold and 277 ounces silver to the ton.

The Williams Smelting company has the wagon road to the mines in such condition as to permit the use of their steam motor for the transportation of ore.

The White Hills Mining company of Mohave county is now running, but fifteen of its forty stamps, but is boring for water with which to run all stamps.

The Old Dominion Copper company of Globe will start up its smelter with a new engine and blower as soon as the railroad reaches Globe, which will be some time in this month.

The Sheepstall mine near the Colorado river in Mohave county, is keeping ten stamps supplied with ore yielding eight ounces of gold and seventy to eighty ounces of silver to the ton.

To give our miners an idea of how they drill elsewhere in contests we print the following note of the drilling contest at Victor, Colorado: "One of the best contests ever had in Victor took place the Fourth in the annual drilling match as one of the features of the big celebration. The drilling was in Gunnison granite. Only members of the miners' union were permitted to contest. The following were the results: Lamb and McKenzie, 35 5-16 inches; Shea and Fuller, 26 15-100 inches; Mallard and Carbonau, 35 9-16 inches; Lyons and McCullough, 36 9-16 inches, first prize; Lindquist and Lundburg, the terrible Swedes, and last year's champions, 36 3-10 inches; Sabbo and Crawford, 36 5-16 inches, second prize. The prizes were \$200 and \$100. This was one of the greatest celebrations ever held in the district. There were over 20,000 people present."

## CHRONOLOGY OF THE WAR.

1895.

February 24—Insurrection breaks out in three of Cuba's six provinces.

March 1—Fourteen hundred additional troops sent to Cuba.

March 31—General Antonio Maceo proclaimed commander of the insurgent army.

April 13—Flor Crombet, insurgent leader, killed at Palmarito.

April 14—Captain General Cajella displaced by Campos.

May 14—Battle of Guantanamo; 400 Spanish killed by insurgents under Gomez.

May 15—Insurgents make important captures at Bayamo.

May 19—Insurgent leader, Jose Marti, killed at Dos Rios.

May 21—General Gomez and 700 cavalry repulsed at Rio.

November 17—General Maceo near Santa Clara with 1,900 men defeats 2,800 Spanish troops.

December 23—Campos (10,000 men) meets Gomez (7,000 men) and is repulsed with great losses.

1896.

February 10—Weyler displaces Captain General Campos.

February 12—Eighteen thousand new Spanish troops sent into the field.

February 17—Weyler issues his reconcentrado proclamations.

March 1—The trocha is established.

April 11—Maceo crosses the trocha with 3,000 men and drives back the Spanish.

July 9-11—Gomez wins the battle of Najasa after fifty hours' fighting.

October 1—The rebellion up to this time has cost Spain 250 million dollars.

December 4—General Antonio Maceo killed by treachery.

December 10—General Ruiz Rivera succeeds Maceo.

1897.

August 3—Premier Canovas of Spain assassinated.

October 2—Weyler recalled by the Sagasta liberal ministry on pressure from the United States.

November 27—Decree from government at Madrid granting autonomy to Cuba.

1898.

January 24—United States battleship Maine ordered to Havana on a peaceful mission.

February 10—De Lome, Spanish

minister, recalled for unwarranted personalities reflecting on President McKinley.

February 15—The United States battleship Maine blown up in Havana harbor and 266 lives lost.

February 17—United States board of inquiry on the explosion of the Maine appointed.

February 20—Spanish cruiser Vizcaya anchors off Staten Island, N. Y.

February 22—Spanish board of inquiry reports destruction of the Maine an accident of internal origin.

March 9—Emergency bill, 50 million dollars for United States coast defenses passed.

March 23—The president sends a message with the Maine report to congress.

April 9—General Fitzhugh Lee and other consuls leave Cuba.

April 11—The president sends a message to congress recommending armed intervention in Cuba.

April 15—War department orders regular troops to the coast.

April 16—The intervention resolutions passed by the senate.

April 19—The house passes the intervention resolutions. The president prepares an ultimatum to Spain demanding the evacuation of Cuba within three days.

April 20—The Cuban resolutions signed by the president. Spanish minister, Polo y Benabre, asks for his passports.

April 21—The United States minister, General Woodford, is given his passports in Madrid. Spain's severance of diplomatic relations held to be a declaration of war.

April 22—North Atlantic squadron sails to blockade Cuban ports. First shot fired, when the United States gunboat Nashville captured the Spanish coast trader, Ventura. President's proclamation to all nations declaring the blockade of Cuban ports.

April 23—The president's call issued for 125,000 volunteers.

April 24—Spain's first shot at United States from masked batteries at Matanzas on the United States gunboat Foote.

Capture of the Catalina by the Detroit, the Candia, by the Wilmington and the Saturnina by the Winona.

April 25—Congress declares war. Secretary of State Sherman resigns. Mangrove captures the Panama.

April 26—President's proclamation issues on Spanish vessels in United States ports. William R. Day made secretary of state.

April 27—Atlantic squadron sails from Hong Kong to meet the Spanish fleet at the Philippine islands. United States cruisers New York, Cincinnati and monitor Puritan silence the batteries at Matanzas. The United States monitor Terror captured the Spanish steamer Guido.

April 28—United States gunboat Newport captured the Spanish sloop Encargia. Spanish forts at Cabananas demolished by guns of the flagship New York.

April 30—The Paris in New York and the Oregon and Marietta at Rio de Janeiro.

May 1—Spanish fleet at Manila demolished by Dewey. Fourteen vessels of the enemy destroyed, about 400 killed and several hundred injured. Not an American vessel injured nor an American life lost, and only six men slightly injured. Admiral Montojo of the Spanish fleet admits total defeat.

May 2—Congress appropriated \$35,720,945 for the army of invasion. Naval bill for thirty-five new warships sent to the president for signature. Martial law proclaimed in Madrid. Eight transports ordered to Tampa for army of invasion. Dewey holds the Philippines.

May 3—President names major and brigadier-generals of volunteers. Serious riots in Spanish provinces. Oregon (United States battleship) sailed from Rio Janeiro.

May 4—Admiral Sampson's fleet sails under sealed orders. Hawaii tenders islands to the United States for war uses. The Arizona troops leave Prescott for the front.

May 5—The French liner Lafayette captured and turned loose.

May 7—Commodore Dewey's report on battle of Manila received.

May 9—Congress passes vote of thanks to Dewey and makes him rear admiral.

May 10—Cape Verde squadron reported anchored at Cadiz. Oregon at Bahia.

May 11—Troops breaking camp at Chickamauga preparatory for transportation south. Spanish torpedo boat destroyer destroyed blown up at Gibraltar.

May 12—News was received of arrival of Spanish Cape Verde squadron at Minique, West Indies. The gunboat Wilmington, the torpedo boat Winslow and the auxiliary gunboat Hudson, while in Cardenas bay, attacked by Spanish batteries and gunboats. Ensign Bagley and four of the Winslow's crew killed, and town of Cardenas was shelled. An engagement reported at Cienfuegos, in which the Americans were said to have been repulsed.

May 13—Rear Admiral Sampson reported that he had bombarded the forts at San Juan, Porto Rico, with a loss of two men killed and six wounded. The American squadron being injured. The flying squadron, under Commodore Schley, sailed under secret orders from Hampton Roads.

May 14—The Spanish fleet was reported at Curacao, off the Venezuelan coast, and Admiral Sampson was off Puerto Plata, Hayti. American report of Cienfuegos affair reached Key West and told of the killing of Reagan a marine on the Marblehead, and the wounding of five others, while cutting the cable in Cienfuegos bay, in small open boats, under hot Spanish fire. The Marblehead, Nashville and Winslow took part, raising the Spanish defenses there.

May 15—The flying squadron reached Charleston, S. C. Rear Admiral Dewey reported the capture of Spanish revenue cutter at Manila, and that he could still hold the bay. Spain's cabinet resigns. Steamer Guisac failed to land on coast of Cuba.

May 16—Spanish squadron at Curacao. The naval department shuts off news. France disclaims hostility.

May 18—Battleship Oregon safe after 13,000 mile cruise. Cruiser Charleston sailed from Mare Island for the Philippines. Schley's squadron at

Key West. New Spanish ministry formed.

May 19—Spanish squadron reported landed at Santiago de Cuba. Cruiser Charleston returned to Mare Island for slight repairs. Arrangements made for exchange of prisoners.

May 20—Reported victories of insurgents in Cuba. Polo banished from Canada.

May 21—The monitor Monterey ordered to Manila.

May 22—Cruiser Charleston sailed from San Francisco for Manila.

May 23—The British steamer Ardanmore seized by the auxiliary gunboat Osceola and brought to Key West as a prize, and then released. Troops embarked on City of Peking at San Francisco for Manila.

May 24—Battleship Oregon arrives at Jupiter Inlet, Florida.

May 25—President issues call for 75,000 more volunteers. The City of Peking and City of Sydney sail for Manila with troops.

May 26—Oregon arrived at Key West.

May 27—It was reported that Cervera with the Spanish Cape Verde fleet was bottled up in Santiago, as had been thought.

May 28—The cruiser Columbia was damaged off Fire Island by collision with the steamer Foscolia, the latter sinking.

May 29—Commodore Schley reported sighting the Spanish fleet or part of it in Santiago harbor.

May 30—General Shafter was ordered to embark 15,000 or more troops at Tampa. Santiago was thought to be their destination.

June 1—Troops that sailed for Guantanamo from Key West under command of Col. Laceret landed on Cuban soil. Santiago reported stormed.

June 2—Report of storming of Santiago turns out to be but a reconnaissance by Schley. The collier Merrimac sunk in Santiago harbor by order of Sampson.

June 4—Report from Sampson that Merrimac commanded by Lieutenant Hobson was sunk. Hobson and crew of seven hailed as heroes. They were captured after sinking the Merrimac as an obstruction in the harbor. Arrangements under way for their exchange. W. J. Bryan's regiment accepted by the government.

June 5—Steps taken to expel Lieutenant Carranza and Senor DuBois, the spies, out of Canada. Torpedo boat destroyer "Terror" reported destroyed. Story doubted.

June 6—Still bombarding Santiago fortifications. At Manila the insurgents still winning victories.

June 7—Sampson reports silencing the forts at Santiago. The monitor Monterey sailed from San Francisco for Manila.

June 11—The American flag floating over Guantanamo.

June 12—First land meeting at Guantanamo between Spanish guerrillas and marines. Americans lost four men. Report that 17,000 Americans have landed near Santiago de Cuba.

June 13—The president signed the war revenue bill.

June 15—The house voted for annexation of Hawaii by a vote of 209 to 91.

June 16—Sampson still bombarding Santiago de Cuba.

June 22—The American troops effected a landing at Balquira, near Santiago.

June 24—Serious engagement between American cavalry and "Rough Riders" and the Spanish at Playa del Este. The Americans lost about a dozen men and had about fifty wounded. They drove the Spanish from position. Major Brodie and Captain McClintock among the wounded.

June 26—Camara's fleet reached Port Said and awaited orders.

June 27—The administration has decided to send a squadron to attack the coast of Spain.

June 28—Captain Sigbee had a fight with the Terror, compelling the latter to put back into San Juan, disabled.

June 29—The Egyptians refuse to allow Camara's fleet to coal at Port Said.

July 1—Engagement near Santiago, rumored estimate of American loss 500. Captain William O'Neill of Arizona among the killed.

July 2—The Spaniards made unsuccessful efforts to retake San Juan. Admiral Sampson continues shelling Morro castle, doing great damage.

July 3—Destruction of Cervera's fleet outside of Santiago harbor. General Shafter demands surrender of Santiago. First Manila expedition joins Dewey, after stopping at the Ladrones islands and capturing the Spanish officers there.

July 6—Hawaii annexed.

July 7—General Miles sails for Cuba.

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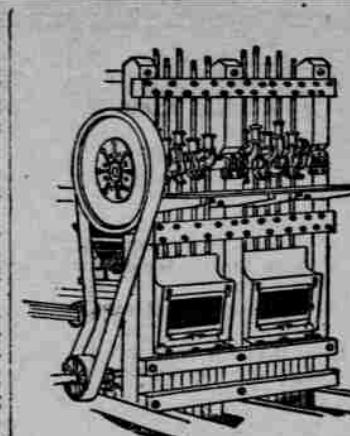
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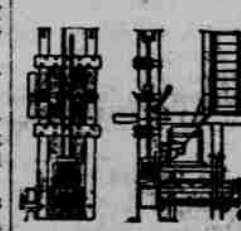
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